

# Work Order ID 60613

Thursday, July 15, 2010 10:25:46 AM



Page 1

Item ID: D350-561-141

Accept



Setup Start



Revision ID:

Stop



Item Name: Single Cargo Mirror Assembly

Start Date: 7/15/2010 Start Qty: 1.00



Cust Item ID:

Required Date: 7/22/2010 Req'd Qty: 1.00

Customer:

Reference:

Approvals: Process Plan: *R*

Date: *10-7-15* Tooling:

Date:

Run Start



QC:

Date: SPC (Y/N):

Date:

Stop



Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

Draw Nbr

Revision Nbr

N/A

Rev N/A

100

0.00



DOCUMENT CONTROL

DC

Memo

0.00

Document Control

Photocopy bluefile and create labels per PPP D350-561-141 CHG003

*S 10/08/04*

*10/07/03*

105

0.00



Pick Kit

Memo

0.00

Packaging

Packaging

*11/1/03*

110

0.00



QC4- 100% Inspect kits for completeness

Memo

0.00

QC

Quality Control

*S 10/08/04*

*(X)*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)							
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector	
			Initial Chief Eng	Action Description Chief Eng	Sign & Date				

**NOTE:** Date & initial all entries

**Work Order ID 60613**

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Item ID: D350-561-141

Accept

Revision ID:

Item Name: Single Cargo Mirror Assembly

Start Date: 7/15/2010 Start Qty: 1.00

Required Date: 7/22/2010 Req'd Qty: 1.00

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_  
QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_

Cust Item ID:



Customer:

Setup Start

Stop

Run Start

Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120		0.00							
	Packaging								
Packaging	Memo	0.00							
Packaging	Identify and pack for shipping as per PPP D350-561-141								
130		0.00							
	QC21- Final Inspection - Work Order Release								
QC	Memo	0.00							
Quality Control									

NUE

10/12/04

10/08/04

MF  
10-8-04

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

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Work Order ID: 60613

Parent Item: D350-561-141

Parent Item Name: Single Cargo Mirror Assembly

Start Date: 7/15/2010

Required Date: 7/22/2010

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP A 07.07.26 new issue (DSI9379) EC verified by:JLM IPP rev  
B 10.02.16 per ecn 10-523 EC verified by: DD IPP Rev:C add pick kit  
DD 10.03.15 verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D2011-101 6" Mirror		Manufactured	No			105	Each	19.0000	1.1	1			
<div> <div>Location</div> <div>ST231</div> <div>16151</div> <div>58398</div> </div> <div> <div>Loc Qty</div> <div>19</div> <div>1</div> <div>18</div> </div> <div> <div>Loc Code</div> <div></div> </div>													
D2012-105 Arm		Manufactured	No			105	Each	2.0000	1	1			
<div> <div>Location</div> <div>ST229</div> <div>57544</div> </div> <div> <div>Loc Qty</div> <div>2</div> <div>2</div> </div> <div> <div>Loc Code</div> <div></div> </div>													
D2012-107 Clevis		Manufactured	No			105	Each	25.0000	1	1			
<div> <div>Location</div> <div>ST004</div> <div>40274</div> <div>46634</div> </div> <div> <div>Loc Qty</div> <div>25</div> <div>7</div> <div>18</div> </div> <div> <div>Loc Code</div> <div></div> </div>													
D2012-111 Bracket		Manufactured	No			105	Each	12.0000	1	1			
<div> <div>Location</div> <div>ST004</div> <div>40148</div> </div> <div> <div>Loc Qty</div> <div>12</div> <div>12</div> </div> <div> <div>Loc Code</div> <div></div> </div>													

58398

57544

40274

40148

6/10/8/3 ①

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

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Work Order ID: 60613

Parent Item: D350-561-141

Parent Item Name: Single Cargo Mirror Assembly

D2012-115 Manufactured No 105 Each

Bracket, Clevis

Location Loc Qty  
ST004 53  
25581 53

Start Date: 7/15/2010

Required Date: 7/22/2010

Start Qty: 1.00

Required Qty: 1.00

53.0000

Loc Code

D2022-101 Manufactured No 105 Each

Spacer

Location Loc Qty  
ST504 131  
50746 33  
52325 98

131.0000

Loc Code

D3629-1 Manufactured No 105 Each

Bracket

Location Loc Qty  
ST244A 7  
48560 7

7.0000

Loc Code

D3635-1 Manufactured No 105 Each

Gasket

Location Loc Qty  
ST076 9  
60427 9

9.0000

Loc Code

D3635-3 Manufactured No 105 Each

Gasket

Location Loc Qty  
ST076 36  
56399 36

36.0000

Loc Code

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Shop Packet Print

Page 2

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)							
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date				

**NOTE:** Date & initial all entries



# Picklist Print

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Work Order ID: 60613

Parent Item: D350-561-141

Parent Item Name: Single Cargo Mirror Assembly

Start Date: 7/15/2010

Required Date: 7/22/2010

Start Qty: 1.00

Required Qty: 1.00

D3646-1 Manufactured No 105 Each

8.0000



Arm

Location

Loc Qty

ST229

8

58836

8

D3646-3 Manufactured No 105 Each

6.0000



Arm

Location

Loc Qty

ST229

6

52668

1

58837

5

D4070-041 Manufactured No 105 Each

65.0000



Clamp

Location

Loc Qty

ST460

65

56381

65

AN3-4A Purchased No 105 Each

1,327.000



Bolt

Location

Loc Qty

ST350

1327

104214

206

104291

300

104322

200

104374

200

104625

300

104817

121

Loc Code



Loc Code



Loc Code



Loc Code



58836

52668

56381

104214

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Page 3

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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# Picklist Print

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Work Order ID: 60613

Parent Item: D350-561-141

Parent Item Name: Single Cargo Mirror Assembly

AN3-6A Purchased No 105 Each



Bolt

## Location

## Loc Qty

ST351	303
113359	103
114941	200

Start Date: 7/15/2010

Required Date: 7/22/2010

Start Qty: 1.00

Required Qty: 1.00

303.0000



## Loc Code

M113359

AN4-5A Purchased No 105 Each



Bolt

## Location

## Loc Qty

ST351	3
6651	3
ST356	299
114108	13
114330	186
115016	100

302.0000



## Loc Code

6651

AN4-10A Purchased No 105 Each



Bolt

## Location

## Loc Qty

ST356	125
113422	25
114523	100

125.0000



## Loc Code

M113422

AN960JD10 NAS1149D0363J Purchased No 105 Each



Washer

AN960JD4T6 NAS1149D0463J Purchased No 105 Each



Washer

0.0000



0.0000



0.0000



M115107

M115000

7/18/13

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W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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Work Order ID: 60613

Parent Item: D350-561-141

Parent Item Name: Single Cargo Mirror Assembly



MS21042L3 Purchased No 105 Each



Nut

Location	Loc Qty
ST300	2684
112385	4
114523	204
114718	476
114784	2000

Start Date: 7/15/2010

Required Date: 7/22/2010

Start Qty: 1.00

Required Qty: 1.00

2,684.000

4

4



Loc Code

1114718

MS21042L4 Purchased No 105 Each



Nut

Location	Loc Qty
ST300	4191
113422	68
114523	28
114718	95
114784	2000
115108	2000

4,191.000

4

4



Loc Code

1114784

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# REFERENCE ONLY

## DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS D350-561 REV. C

REF. CANADIAN STC: SH91-20 ISSUE 2

REF. FAA STC: SH856NE

To reduce vibration, Dart has developed the D350-561-141/-143 Mirror Installations to replace the D350-561-041/-043 Mirror Installations. For customers with D350-561-041/-043 Mirror Installations at CHG 005 or earlier who would like to upgrade their installation, the DSI 9379-011 Upgrade Kit can be obtained from Dart. The components for DSI 9379-011 Kit are as defined in Section 1.0 below.

Customers upgrading their installation from D350-561-041/-043 to D350-561-141/-143 should follow instructions given in Figures 1 through 5 of DSI 9379 and refer to Installation Instructions D350-561 Rev. C as applicable.

Customers who are installing a D350-561-141/-143, should refer to Figures 2 through 5 of DSI 9379 and refer to Installation Instructions D350-561 Rev. C as applicable.

This service instruction details the D350-561-141/-143 kits at CHANGE 003 or later, which use D4070-041 Clamps (replaces MS21919WDG7 clamps). For -141/-143 kits at earlier change numbers, the DSI-9379-013 Upgrade kit is available to replace the mil-spec clamps with more robust D4070-041 Clamps.

### 1.0 PARTS LIST

Qty -141	Qty -143	Qty -045	Qty -011	Qty -013	Part Number	Description
X	1				D350-561-141	SINGLE MIRROR INSTALLATION (REPLACES -041)
	X				D350-561-143	DUAL MIRROR INSTALLATION (REPLACES -043)
	1	X			D350-561-045	MIRROR KIT
			X		DSI-9379-011	UPGRADE KIT
				X	DSI-9379-013	UPGRADE KIT
1		1			D2011-101	MIRROR
1					D2012-105	ARM
1					D2012-107	CLEVIS
1					D2012-111	BRACKET
		2			D2012-113	CLAMP
1					D2012-115	BRACKET
2					D2022-101	SPACER
1*		1*			D3014-1	LOCKNUT
1			1		D3629-1	BRACKET
1			1		D3635-1	GASKET
2			2		D3635-3	GASKET
1			1		D3646-1	ARM
1			1		D3646-3	ARM
2			2	2	D4070-041	CLAMP
3			3		AN3-4A	BOLT
1					AN3-6A	BOLT
3			2	2	AN4-5A	BOLT
1					AN4-10A	BOLT
8			6		AN960JD10	WASHER
8			4	4	AN960JD416	WASHER
1*		1*			AN960JD416L	WASHER
4			3		MS21042L3	NUT (OR MS21042-3)
4			2	2	MS21042L4	NUT (OR MS21042-4)

\*INCLUDED AS PART OF D2011-101 MIRROR

CANADA  
DEPARTMENT OF TRANSPORT  
AIRCRAFT CERTIFICATION  
BRANCH  
DAO # 01-O-01

APPROVED  
BY: *D. Shepherd*  
D. SHEPHERD (DE # 02)

DATE: 10.02.12  
CERT. NO.: SH91-20  
ISSUE NO.: 2

C	D4070-041 WAS MS21919WDG7	CP	10.02.12
B	MS21919WDG7 WAS MS21929WDG7	DC	07.11.26
A	NEW ISSUE	MB	07.07.10
REV.	DESCRIPTION	BY	DATE
DESIGN		<b>DART AEROSPACE LTD</b>	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. C
MFG. APPR.		DSI 9379	SHEET 1 OF 5
APPROVED		TITLE	SCALE
DE APPR.		CARGO MIRROR UPDRAGE KIT	NTS
DATE	10.02.12	COPYRIGHT © 2007 BY DART AEROSPACE LTD	
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